# Carvers' and Gilders' Work.

IVORY PHOTOGRAPH OR MIRROR-STAND.

By J. H. Evans.

The present illustration, as above named, affords scope for bringing before our readers' notice the manner and use of a variety of tools connected with the ornamental turning lathe. I have already described a number of tools, but the present specimen is one in which many of them have been applied, and, although it looks a simple thing, no fewer than five separate parts of the apparatus were employed to produce it, viz., spherical slide-rest, spiral apparatus, universal cutter, oval chuck, and drill spindle. Any amateur turner possessing these tools as adjuncts to a good lathe, need not crave for more, and with such can, in a short time, have an elaborate collection of
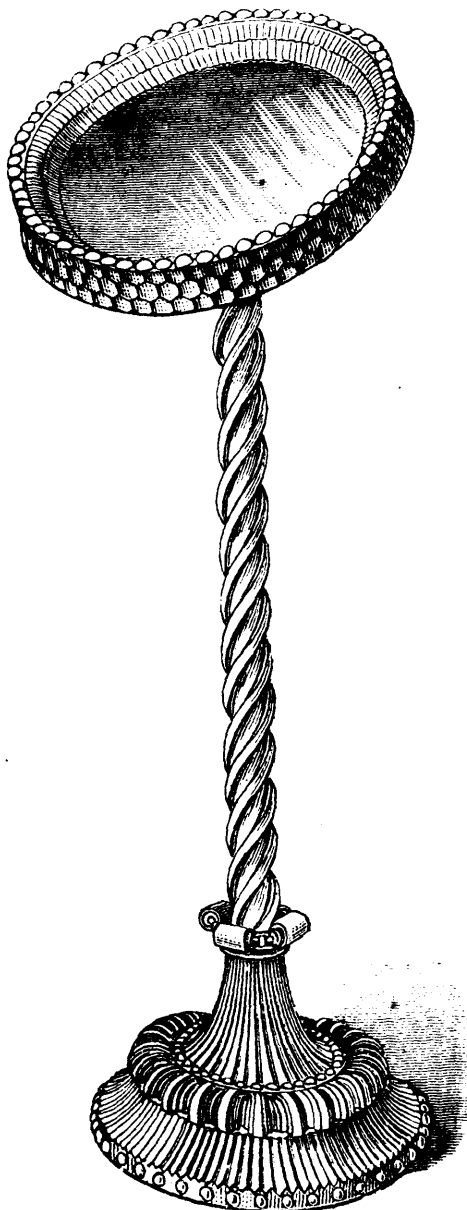

IVORY PHOTOGRAPH OR MIRROR-STAND.

specimens. I will not dilate, however, upon what any one might do, but presume that those who take sufficient interest to read these subjects will be better pleased with the information how to reproduce the same. The pillar or column does

not appear to present any difficulty with regard to the material; but, unless a turner has a large stock of cut-up ivory, it is not an easy thing to get without waste. This, again, I must leave to the turner and his own resources, and will proceed at once to describe the way to make a stand similar to the illustration.

The base is 4in. in diameter, and, on the extreme edge, it will be seen, are a series of half-beads. There are 40 of them, obtained by using the 120 circle of division, and advancing three at each cut; it will require what is termed the astragal or flat-ended drill to give these beads a prominent effect, and it is the flat end of the drill that clears away the superfluous material between each bead. In some cases it is preferred to leave a point between each bead; then the pointed drill may be used.
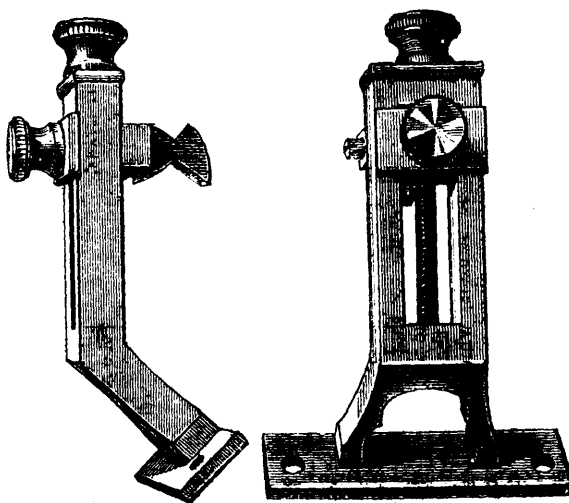
Having this row of beads cut to satisfaction, the concave curve will form the next part to do. This should be turned to the curve by hand, and the horizontal cutter will then be necessary to cut the pattern; a double hollow tool will be the one to use, and must be extended sufficiently from the centre to allow the tool to cut the same curve as turned. It may happen that, having been turned by hand, it will be difficult to set the tool to exactly the radius required; should this be the case, it must be set as near as possible, and it will be cut up to a perfect curve with the revolution of the cutter. The division of 96 was used, cutting at every hole, consequently, 96 cuts are the natural result. We now come to the convex curve : to do this it will be necessary to use the spherical slide-rest; but the turner about to copy this need not have such a tool; other means, of which there are plenty, must be used. The present having been, however, cut with the spherical rest, I will show how it was done. In order to facilitate the proportions, it is better to rough it all out first; therefore, this curve may also be turned by hand, prior to being finished with the rest. To turn this curve with the circular rest, the tangentwheel must be adjusted so that its centre is under the centre of the curve to be turned; this done, the drill-stock takes the place of the fixed tool in the slide-rest, and in it a step-drill with four steps; there are 24 cuts round this piece, and to do them nicely it will take about four or five cuts, and for the last cut the tool should be taken out and set, as it naturally becomes dull after such a deep pattern. The next part, it will be seen, is simply a small ring of ivory, having upon it 30 beads smaller than those upon the base, but with a drill of similar character. The following piece is a long concave curve : this is also cut with the horizontal cutter, which forms the curve; it has 30 cuts in all, as will be seen by each one pointing to every consecutive bead. At the top of this part the points were again cut with a very fine-pointed cutter, in order to vary the patterns; the next, and last piece, forming the base, is turned somewhat after the shape of a crown, and cut over the curve with the spherical slide-rest. To effect this pattern there must be so many cuts and the same number of divisions passed, so that the plain parts show the same width as the cuts. This pattern might be